the most serious consideration of those who have the welfare of the industry at heart. At present it seems only feasible to advise growers to refrain from planting such plants or from using such other insanitary methods as may jeopardize not only their own crop prospects but those of others in the community as well.

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OBACCO Grading Cuts
Handling Costs and
Gives Trade Confidence

A predominant portion, 86 per cent, of the tobacco consumed annually in the manufacture of eigarette, chewing, and smoking tobacco is sold

directly by the farmer to the manufacturer at auction warehouses, located at large or small cities in the tobacco-producing areas from the banks of the Ohio River southward. Cigar tobacco is not sold at auction.

The auction method of selling tobacco possesses certain advantages, but likewise certain defects are apparent, and efforts to eradicate those

defects have led to a new development in tobacco marketing.

Each of the large tobacco manufacturers has his own grading system developed according to the needs of his own business and has his own series of private grade marks. No two systems are alike. Each manufacturer instructs his buyers the grades to buy and the average price to pay. The transactions are made on the basis of the buyer's private judgment of grade, arrived at from an extremely brief inspection of each pile of tobacco. The farmer does not know the different grade systems, the distinction between grades, or the grade basis for the price he receives. Therein lies his disadvantage. Lacking expert knowledge of tobacco classing, he must sell to expert tobacco buyers whose grades are guarded secrets.

Various circumstances, which have no direct relation to broad economic considerations, influence the prices that buyers pay to growers for their tobacco. One of these is the cost of rehandling to achieve uniformity of grade. In the case of both manufacturer and dealer the tobacco received from the farmer is reassorted for quality, color, length, etc. The cost of this rehandling varies according to the

expertness of the grower in assorting his crop.

Uncertainty as to Uniformity

Another thing that works against the farmer is the buyer's uncertainty as to the uniformity of the quality of the tobacco. The tobacco is arranged in piles on the auction floor (fig. 190), and these piles are sold at a rate varying from 150 to more than 300 per hour. As a rule farmers strive for uniformity, but because they often do not know grade distinctions there may be a mixture as to quality, color, and length. In some cases the piles show the human tendency to place the best tobacco on top to catch the eye of the buyer. Occasionally the interior and base of the pile are composed of low-grade tobacco entirely concealed by better grades of leaf. This practice is known as nesting. The fear of nested tobacco frequently operates to depress prices.

A third circumstance enters into the price—the light conditions in auction warehouses. These warehouses are very large and are lighted by skylights placed at intervals over their low, nearly flat roofs. Since color is an important factor in judging the quality of tobacco, the light that falls upon individual piles exerts a strong influence upon the prices bid.

These, then, are three important factors: (1) Expense of rehandling poorly sorted tobacco, (2) uncertainty as to the proportion in which different grades are present in a mixed pile, and (3) varying light

conditions.

The influence of the third factor is rather uncertain. It may cause one pile to sell higher than a near-by pile of better tobacco, or lower than an adjacent pile of poorer tobacco; it may cause tobacco to sell higher or lower than its real value. The net effect of all three factors



FIGURE 190.—Scene in an auction warehouse, showing tobacco arranged in piles ready for sale. Each pile bears a ticket similar in form to that shown in Figure 191. Approximately five seconds suffices for the sale of a single pile

is to broaden unduly the range of prices, to introduce a lack of stability in prices paid for tobacco comparable in quality, and to create strong dissatisfaction among growers. This dissatisfaction is difficult to deal with, especially in the absence of any universal language for, or authoritative determination of, quality by which the warehouseman can reply to farmers' complaints.

Grading Service Meets the Situation

The grading service, operated jointly by Federal and State agencies, fits into this whole situation with noteworthy results. By it a language of quality is supplied and a measuring rod for the determination of quality is provided—disinterested, unbiased, and sponsored by the Government.

Among its effects it (1) reduces the rehandling costs to dealers and manufacturers, (2) reduces the mixing of grades and therefore the

buyers' uncertainty arising therefrom, and (3) reduces inequalities of

price arising from varying conditions of light.

The services of the federally licensed tobacco graders are available to farmers at a nominal fee at those markets where the service has been inaugurated. The grader goes upon the floor as soon as light conditions are suitable, carefully examines the tobacco, and indicates on the sales ticket the official standard grade. (Fig. 191.) In making his examination of the tobacco, he takes samples from various portions of the pile, and much more time is given to the inspection than is available to buyers under the pressure of rapid sales. Also, as far as possible, all tobacco is examined under similar light conditions.

When the sale of a pile of graded tobacco is opened, the official grade is announced. The first use made of this information is by the warehouseman or his starter, who customarily makes the opening bid on each pile of tobacco. A reference to the grade and to the average price at which the grade has been selling, posted in the warehouse,

gives him an excellent basis.

The buyers find the official grade mark of mimediate value in checking their judgment of quality. The benefits are shown in various ways. Buyers may or may not find that their first judgment is in error; the fear of nested tobacco disappears; they can be more certain of the average grade of the pile and can bid with greater assurance.

Grading Reduces Rejections

Next is the grower. His tobacco has been sold; the question arises whether the price is acceptable. As soon as the auctioneer knocks

down a pile to the highest bidder, the name of the buyer and the price per pound are entered on the ticket. The grower consults this ticket and the record of previous sales posted on the wall to see whether his tobacco brought a price reasonably well in line with the average price for that grade. If it did, he is usually satisfied that he has received a reasonable price. If his price is materially less than

BIG BRICK No. 18360	TYPE 13 U. S. GRADE C 5 U. S. Dept. of Agriculture and S. C. Extension Div. of Markets By
Planter a. Farmen	
Price, \$ 2500	Lbs.
Buyer RJR	X-2

FIGURE 191.—A sales ticket such as is affixed to a pile of tobacco on the auction warchouse floor. The entries, which are purely fictitious, indicate that the tobacco was delivered by A. Farmer, was graded C51 and sold to R. J. R. at \$25 per hundredweight. The number, 18360, is used to identify that particular transaction in the warehouse records, and the X2, in the lower righthand corner shows how a buyer might indicate his private grade

the average for his grade of tobacco, then the grower has an effective basis for rejecting the sale and demanding a new one. Partly because of the greater stability of prices for graded tobacco, and partly because of the more intelligent basis provided for analyzing results of sales, it has been demonstrated that the number of rejections is greatly reduced, and that unwise rejections are practically eliminated.

No phase of the tobacco-grading service is more important than its educational value in teaching the growers how best to handle their product so as to command better prices. Graders find themselves

surrounded by farmers who want to know the distinctions between grades. No better opportunity could be afforded for a practical demonstration of improved methods of sorting, and the fact that the grader is entirely disinterested and is backed by the Federal Government gives him prestige, and makes his friendly suggestions authoritative and acceptable. Results soon become apparent in closer sorting and in the tendency toward greater uniformity of quality. This is the feature of the service that appeals most to the dealer and manufacturer.

The tobacco-grading service is young. It began at Lynchburg, Va., in 1927, made possible by the cooperation of the Virginia Department of Agriculture and Immigration. It had two years' trial at that place. The first appropriation by Congress for the project became available July 1, 1929, and operations have been expanded to selected markets in South Carolina, North Carolina, Virginia, Kentucky, and Tennessee. It is still a new line of work, but the indications are that expansion will come as rapidly as the technic of grading on a large scale and the selection and training of personnel can be accomplished.

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OBACCO Growers Gain by Acting on a Farm Reorganization Study

Dark-tobacco farmers in south-central Virginia who adjusted their farming systems in accordance with the findings of a farm organization

study increased their earnings, on an average, from \$773 in 1922, to \$1,158 in 1927. This was an increase of nearly 50 per cent. The increased earnings in 1927 were made in spite of the fact that tobacco prices were about 50 per cent lower than in 1922, a year as favorable as 1927 for crop production.

In contrast to this improvement in earnings are the results on other farms where no change in the farming system has been made since 1922. On these latter farms, assuming yields and prices for tobacco and for other farm products equal to the average for the State, it was estimated that operator's earnings, due to the decline in tobacco prices, would be about \$150 in 1927 as compared with more than \$800 in 1922.

Farmers who made changes in their farming systems in accordance with the suggestions given have added livestock enterprises for income, increased their feed production somewhat, and have decreased their tobacco acreage. Under the new system there has been an increase in the yield of tobacco and an improvement in its quality. The average yield of tobacco on these farms was about 750 pounds per acre in 1922 and about 900 pounds per acre in 1927. Tobacco produced on these farms in 1922 brought about the same as the average price for the State whereas in 1927 it sold for about 40 per cent more than the average. This improvement in yield and quality resulted from the use of more lime on tobacco land, from growing more legumes, and from the manure from the additional livestock.

Further Improvement Possible

In the development of livestock enterprises for income, several years are required before maximum returns can be realized. Consequently, in 1927 on most of the farms livestock enterprises had not been devel-